103291

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

SEARCH REQUEST FORM											
Requestor's Name: Audet, M.	Serial Number: _ 305.5039	0/-7/-7/									
Search Topic: Please write a detailed statement of search topic. Desterms that may have a special meaning. Give example please attach a copy of the sequence. You may include	es or relevent citations, authors,	e subject matter to be searched. Define any keywords, etc., if known. For sequences,									
Seg. 1	Ds 15-	19									
ST	AFF USE ONLY										
Date completed: 11-14-03 Scarcher: Box or up 34994 Terminal time: 23 23 Elapsed time: CPU time:	Search Site STIC CM-1 Pre-S Type of Search	Vendors									
Total time:	N.A. Sequence	Geninfo									

_____ A.A. Sequence

____ Structure

_____ Bibliographic

Number of Databases: _____

_____SDC

DARC/Questel
Other CSN

Aud t, Maury

Subject:

09736076-Search of 5 Peptides

In the above application, please search the following 5 sequences: SEQ ID NOS: 15, 16, 17, 18, and 19 (including pending DB's RAPM, RAPN).

Thanks.

Maury

11204

703-305-5039.

133656759 204 3

FILE 'REGISTRY' ENTERED AT 14:26:52 ON 14 NOV 2003

L1 31 S MLLG[KR]PPF | LGRPPFETS/SQSP

FILE 'HCAPLUS' ENTERED AT 14:28:05 ON 14 NOV 2003 L2 18 S L1

L2 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2003:765147 HCAPLUS

DOCUMENT NUMBER:

139:241380

TITLE:

Expressed sequence tags from cDNA libraries derived from human mRNAs having intact 5' ends

and their encoded secreted proteins

Tanaka, Hiroaki; Dumas Milne, Edwards Jean-Baptiste; Giordano, Jean-Yves; Jobert,

Severin; Bejanin, Stephane

PATENT ASSIGNEE(S):

Genset, Fr.

SOURCE:

Can. Pat. Appl., 163 pp.

CODEN: CPXXEB

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

': 13

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
			
CA 2343602	AA	20011018	CA 2001-2343602 20010417
CA 2343602	AA	20011018	CA 2001-2343602 20010417
PRIORITY APPLN. INFO.	:		US 2000-197873P P 20000418
			CA 2001-2343602 A 20010417

The sequences of 5' ESTs and consensus contigated 5' ESTs derived from cDNA libraries derived from mRNAs having intact 5' ends are disclosed. The 5' ESTs and consensus contigated 5' ESTs may be used to obtain cDNAs and genomic DNAs corresponding to the 5' ESTs and consensus contigated 5' ESTs. The 5' ESTs and consensus contigated 5' ESTs may also be used in diagnostic, forensic, gene therapy, and chromosome mapping procedures. Upstream regulatory sequences may also be obtained using the 5' ESTs and consensus contigated 5' ESTs. The 5' ESTs and consensus contigated 5' ESTs. The 5' ESTs and consensus contigated 5' ESTs may also be used to design expression vectors and secretion vectors. [This abstract record is one of thirteen records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT 599342-26-4

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(amino acid sequence; expressed sequence tags from cDNA libraries derived from human mRNAs having intact 5' ends and their encoded secreted proteins)

L2 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2003:447168 HCAPLUS

DOCUMENT NUMBER:

139:227956

TITLE:

Cell cycle dependent expression of Plk1 in

synchronized porcine fetal fibroblasts

AUTHOR(S):

Anger, Martin; Kues, Wilfried A.; Klima, Jiri; Mielenz, Manfred; Kubelka, Michal; Motlik, Jan; Esner, Milan; Dvorak, Petr; Carnwath, Joseph W.;

Niemann, Heiner

CORPORATE SOURCE: Institute of Animal Physiology and Genetics,

Libechov, Czech Rep.

Molecular Reproduction and Development (2003), SOURCE:

65(3), 245-253

CODEN: MREDEE; ISSN: 1040-452X

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal English LANGUAGE:

Enzymes of the Polo-like kinase (Plk) family are active in the pathways controlling mitosis in several species. We have cloned cDNA fragments of the porcine homologs of Plk1, Plk2, and Plk3 employing fetal fibroblasts as source. All three partial cDNAs showed high sequence homol. with their mouse and human counterparts and contained the Polo box, a domain characteristic for all Polo kinases. The expression levels of Plk1 mRNA at various points of the cell cycle in synchronized porcine fetal fibroblasts were analyzed by both RT-PCR and the RNase protection assay. Plk1 mRNA was barely detectable in GO and G1, increased during S phase and peaked after the G2/M transition. A monoclonal antibody was generated against an in vitro expressed porcine Plk1-protein fragment and used to detect changes in Plk1 expression at the protein level. Plk1 protein was first detected by immunoblotting at the beginning of S phase and was highest after the G2/M transition. In summary, the Plk1 expression pattern in the pig is similar to that reported for other species. The absence of Plk1 mRNA and protein appears to be a good marker for GO/G1 and thus for the selection of donor cells for nuclear transfer based somatic cloning.

481546-49-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; cDNA sequences of Polo-like kinase (Plk1, Plk2, and Plk3) sequence homologs of pig and cell cycle dependent expression of Plk1 in synchronized porcine fetal fibroblasts)

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:334543 HCAPLUS

DOCUMENT NUMBER: 138:350479

TITLE: Protein and cDNA sequences of human protein

kinase/protein phosphatase sequence homologs

INVENTOR(S): Ota, Toshio; Isogai, Takao; Nishikawa, Tetsuo;

Hayashi, Koji; Otsuka, Kaoru; Yamamoto,

Jun-ichi; Ishii, Shizuko; Sugiyama, Tomoyasu; Wakamatsu, Ai; Nagai, Keiichi; Otsuki, Tetsuji; Funahashi, Shin-ichi; Senoo, Chiaki; Nezu,

Jun-ichi

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 113 pp., Cont.-in-part of

Appl. No. PCT/JP00/05060.

CODEN: USXXCO

DOCUMENT TYPE: Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

```
PATENT NO.
                            KIND
                                    DATE
                                                       APPLICATION NO.
                                                                             DATE
                                    -----
                                                       -----
      US 2003082776
                                    20030501
                                                       US 2002-59585
                             Α1
                                                                             20020129
      JP 2002171977
                             A2
                                    20020618
                                                       JP 2000-196309
                                                                             20000626
      WO 2001009345
                             A1
                                    20010208
                                                      WO 2000-JP5060 20000728
                 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                 CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,
                 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
                 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      WO 2001009319
                             A1
                                    20010208
                                                     WO 2000-JP5065 20000728
                AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,
                GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
                 ΜT
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      EP 1205549
                             A1 20020515
                                                      EP 2000-948282 20000728
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.:
                                                    JP 1999-248036
                                                                         Α
                                                                             19990729
                                                   US 1999-159590P P
                                                                             19991018
                                                    JP 2000-118776
                                                                         Α
                                                                             20000111
                                                                        P
                                                   US 2000-183322P
                                                                             20000217
                                                                         A 20000502
                                                    JP 2000-183767
                                                                         A2 20000728
                                                   WO 2000-JP5060
                                                   WO 2000-JP5065
                                                                         W 20000728
      The invention provides protein and cDNA sequences of human proteins
AΒ
      having the kinase and/or phosphatase-like structure from clones
      which had been isolated and the structures thereof had been determined in
      the Helix Research Institute (helix clones; Japanese Patent
      Application Number 2000-183767) was conducted. Twelve novel genes were
      provided by carrying out homol, search for all the helix clones by
      using the amino acid sequences of known kinases and phosphatases as
      queries. The genes are expected to be involved in intracellular
      signal transduction. The physiol. functions of the inventive genes
      can be tested by using reporter gene assay systems capable of
      detecting signal transduction. The proteins of the present
      invention are useful as target mols. in drug discovery and in the
      development of new pharmaceuticals.
ΙT
      518362-19-1P
      RL: BPN (Biosynthetic preparation); BSU (Biological study,
      unclassified); PRP (Properties); BIOL (Biological study); PREP
      (Preparation)
           (amino acid sequence; protein and cDNA sequences of human protein
          kinase/protein phosphatase sequence homologs)
```

Searcher: Shears 308-4994

ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

2003:97986 HCAPLUS

ACCESSION NUMBER:

138:147705 DOCUMENT NUMBER:

TITLE: Protein and cDNA sequences of human protein

kinase SAK and use in modulation of cellular

proliferation for treatment of cancer

INVENTOR(S): Hitoshi, Yasumichi; Demo, Susan; Jenkins, Yonchu

PATENT ASSIGNEE(S): Rigel Pharmaceuticals, Inc., USA SOURCE: U.S. Pat. Appl. Publ., 41 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.			KI	ND	DATE			APPLICATION NO.					DATE		
	2003			A A		2003			-			6021 8243		2001		
	₩:	AE, CN,	AG, CO,	AL, CR,	AM, CU,	AT, CZ,	AU, DE,	AZ, DK,	BA, DM,	BB, DZ,	BG, EC,	BR, EE,	BY, ES,	BZ, FI, KP,	CA, GB,	GD,
		NO, TM,	NZ, TN,	OM, TR,	PH, TT,	PL,	PT, UA,	RO, UG,	RU, US,	SD,	SE,	SG,	SI,	MW, SK, ZM,	SL,	ТJ,
	RW:	GH, BG, MC,	GM, CH, NL,	KE, CY, PT,	LS, CZ, SE,	MW, DE, SK,	MZ, DK, TR,	SD, EE, BF,	SL, ES,	FI,	FR,	GB,	GR,	ZW, IE, GA,	ΙT,	LU,
PRIORITY	APP	•	•	•	NE,	SN,	10,	1	US 20				_	20010 2001		

AB The present invention relates to regulation of cellular proliferation. More particularly, the present invention is directed to nucleic acids encoding SAK, which is a protein kinase involved in modulation of cellular proliferation and cell cycle regulation. The invention further relates to methods for identifying and using agents, including small mol. chemical compns., antibodies, peptides, cyclic peptides, nucleic acids, RNAi, antisense nucleic acids, and ribozymes, that modulate cell cycle regulation and cellular proliferation via modulation of SAK; as well as to the use of expression profiles and compns. in diagnosis and therapy related to cell cycle regulation and modulation of cellular proliferation, e.g., for treatment of cancer and other diseases of cellular proliferation.

ΙT 496831-29-9

RL: PRP (Properties)

(unclaimed sequence; protein and cDNA sequences of human protein kinase SAK and use in modulation of cellular proliferation for treatment of cancer)

ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:55959 HCAPLUS

DOCUMENT NUMBER: 138:84325

TITLE: Generation and initial analysis of more than

15,000 full-length human and mouse cDNA

sequences

AUTHOR(S): Strausberg, Robert L.; Feingold, Elise A.;

> Grouse, Lynette H.; Derge, Jeffery G.; Klausner, Richard D.; Collins, Francis S.; Wagner, Lukas;

Shenmen, Carolyn M.; Schuler, Gregory D.; Altschul, Stephen F.; Zeeberg, Barry; Buetow, Kenneth H.; Schaefer, Carl F.; Bhat, Narayan K.; Hopkins, Ralph F.; Jordan, Heather; Moore, Troy; Max, Steve I.; Wang, Jun; Hsieh, Florence; Diatchenko, Luda; Marusina, Kate; Farmer, Andrew A.; Rubin, Gerald M.; Hong, Ling; Stapleton, Mark; Soares, M. Bento; Bonaldo, Maria F.; Casavant, Tom L.; Scheetz, Todd E.; Brownstein, Michael J.; Usdin, Ted B.; Toshiyuki, Shiraki; Carninci, Piero; Prange, Christa; Raha, Sam S.; Loquellano, Naomi A.; Peters, Garrick J.; Abramson, Rick D.; Mullahy, Sara J.; Bosak, Stephanie A.; McEwan, Paul J.; McKernan, Kevin J.; Malek, Joel A.; Gunaratne, Preethi H.; Richards, Stephen; Worley, Kim C.; Hale, Sarah; Garcia, Angela M.; Gay, Laura J.; Hulyk, Stephen W.; Villalon, Debbie K.; Muzny, Donna M.; Sodergren, Erica J.; Lu, Xiuhua; Gibbs, Richard A.; Fahey, Jessica; Helton, Erin; Ketteman, Mark; Madan, Anuradha; Rodrigues, Stephanie; Sanchez, Amy; Whiting, Michelle; Madan, Anup; Young, Alice C.; Shevchenko, Yuriy; Bouffard, Gerard G.; Blakesley, Robert W.; Touchman, Jeffrey W.; Green, Eric D.; Dickson, Mark C.; Rodriguez, Alex C.; Grimwood, Jane; Schmutz, Jeremy; Myers, Richard M.; Butterfield, Yaron S. N.; Krzywinski, Martin I.; Skalska, Ursula; Smailus, Duane E.; Schnerch, Angelique; Schein, Jacqueline E.; Jones, Steven J. M.; Marra, Marco Α.

CORPORATE SOURCE:

SOURCE:

National Cancer Institute, NIH, Bethesda, MD,

20892-2580, USA

Proceedings of the National Academy of Sciences of the United States of America (2002), 99(26),

16899-16903

CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

Journal English

AB The National Institutes of Health Mammalian Gene Collection (MGC) Program is a multiinstitutional effort to identify and sequence a cDNA clone containing a complete ORF for each human and mouse gene. ESTs were generated from libraries enriched for full-length cDNAs and analyzed to identify candidate full-ORF clones, which then were sequenced to high accuracy. The MGC has currently sequenced and verified the full ORF for a nonredundant set of >9000 human and >6000 mouse genes. Candidate full-ORF clones for an addnl. 7800 human and 3500 mouse genes also have been identified. All MGC sequences and clones are available without restriction through public databases and clone distribution networks. [This abstract record is one of eleven records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

ΙT 483718-42-9

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; generation and initial anal. of more than

Searcher : 308-4994 Shears

15,000 full-length human and mouse cDNA sequences)

L2 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:55946 HCAPLUS

DOCUMENT NUMBER: 138:84320

TITLE: Generation and initial analysis of more than

15,000 full-length human and mouse cDNA

sequences

AUTHOR(S): Strausberg, Robert L.; Feingold, Elise A.;

Grouse, Lynette H.; Derge, Jeffery G.; Klausner, Richard D.; Collins, Francis S.; Wagner, Lukas; Shenmen, Carolyn M.; Schuler, Gregory D.;

Altschul, Stephen F.; Zeeberg, Barry; Buetow, Kenneth H.; Schaefer, Carl F.; Bhat, Narayan K.; Hopkins, Ralph F.; Jordan, Heather; Moore, Troy;

Max, Steve I.; Wang, Jun; Hsieh, Florence; Diatchenko, Luda; Marusina, Kate; Farmer, Andrew

A.; Rubin, Gerald M.; Hong, Ling; Stapleton, Mark; Soares, M. Bento; Bonaldo, Maria F.; Casavant, Tom L.; Scheetz, Todd E.; Brownstein, Michael J.; Usdin, Ted B.; Toshiyuki, Shiraki;

Carninci, Piero; Prange, Christa; Raha, Sam S.; Loquellano, Naomi A.; Peters, Garrick J.; Abramson, Rick D.; Mullahy, Sara J.; Bosak, Stephanie A.; McEwan, Paul J.; McKernan, Kevin

J.; Malek, Joel A.; Gunaratne, Preethi H.; Richards, Stephen; Worley, Kim C.; Hale, Sarah; Garcia, Angela M.; Gay, Laura J.; Hulyk, Stephen

W.; Villalon, Debbie K.; Muzny, Donna M.; Sodergren, Erica J.; Lu, Xiuhua; Gibbs, Richard

A.; Fahey, Jessica; Helton, Erin; Ketteman, Mark; Madan, Anuradha; Rodrigues, Stephanie; Sanchez, Amy; Whiting, Michelle; Madan, Anup; Young, Alice C.; Shevchenko, Yuriy; Bouffard, Gerard G.; Blakesley, Robert W.; Touchman, Jeffrey W.; Green, Eric D.; Dickson, Mark C.; Rodriguez, Alex C.; Grimwood, Jane; Schmutz,

Jeremy; Myers, Richard M.; Butterfield, Yaron S. N.; Krzywinski, Martin I.; Skalska, Ursula; Smailus, Duane E.; Schnerch, Angelique; Schein, Jacqueline E.; Jones, Steven J. M.; Marra, Marco

Α.

CORPORATE SOURCE: Mammalian Gene Collection (MGC) Program Team,

National Cancer Institute, NIH, Bethesda, MD,

20892-2580, USA

SOURCE: Proceedings of the National Academy of Sciences

of the United States of America (2002), 99(26),

16899-16903

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

AB The National Institutes of Health Mammalian Gene Collection (MGC) Program is a multiinstitutional effort to identify and sequence a cDNA clone containing a complete ORF for each human and mouse gene. ESTs were generated from libraries enriched for full-length cDNAs and analyzed to identify candidate full-ORF clones, which then were sequenced to high accuracy. The MGC has currently sequenced and

verified the full ORF for a nonredundant set of >9000 human and >6000 mouse genes. Candidate full-ORF clones for an addnl. 7800 human and 3500 mouse genes also have been identified. All MGC sequences and clones are available without restriction through public databases and clone distribution networks. [This abstract record is one of eleven records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT 480062-88-2

> RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; generation and initial anal. of more than 15,000 full-length human and mouse cDNA sequences)

ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN L2

ACCESSION NUMBER: 2002:889007 HCAPLUS

DOCUMENT NUMBER: 138:347

Sequences of genetic markers for evaluating TITLE:

estrogenic activity

INVENTOR(S): Barbosa, Miguel S.; Brady, Helen A.; Chan, Kyle

W. H.; Pardinas, Jose R.

Signal Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S):

DATE

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

KIND

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                                              WO 2002-US14597 20020510
     WO 2002093124
                       A2
                              20021121
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
              NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
              TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
              SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
     US 2003054332
                         A1
                              20030320
                                               US 2001-853544
                                                              A 20010510
                                            US 2001-853544
PRIORITY APPLN. INFO.:
     Methods are provided for evaluating estrogenic and antiestrogenic
     effects of candidate therapeutic agents. Such methods are generally
     based on assays to detect modulation of estrogen-regulated marker
     expression in one or more specific cell types. Agents identified
     using such methods may be used, for example, in the prevention and
     treatment of diseases such as osteoporosis, cardiovascular disease
     and cancer. In addition, the gene discovery approaches discussed have
     identified a using gene profile for estrogen regulation in vascular
```

APPLICATION NO.

DATE

Searcher : Shears 308-4994

endothelial cells. This gene profile will allow characterization of the effects of potential SERMs in the cardiovascular system this gene profile and the assays established with these genes will enable more extensive evaluation of tissue specific properties of SERM compds. and provide a better understanding of cardiovascular effects

of SERMs.

IT 402712-46-3

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(Biological study)

(amino acid sequence; sequences of genetic markers for evaluating estrogenic activity)

L2 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:616256 HCAPLUS

DOCUMENT NUMBER: 137:181594

TITLE: Dominant-negative variants of human protein

kinases that inhibit the phosphorylation activity of their active enzyme isoforms

INVENTOR(S): Levine, Zurit; Bernstein, Jeanne

PATENT ASSIGNEE(S): Compugen Ltd., Israel

SOURCE: U.S. Pat. Appl. Publ., 170 pp., Cont.-in-part of

U.S. Ser. No. 724,676.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE US 2002110811 A1 20020815 US 2001-771161 20010126 PRIORITY APPLN. INFO.: IL 2000-135619 Α 20000512 A 20000615 IL 2000-136776 US 2000-724676 A2 20001128

AB The present invention concerns 91 nucleic acid sequences and amino acid sequences of variants of various human kinases, i.e. of sequences which inhibit activity of kinases in a dominant manner. The variants lack a domain or region required for phosphorylation, and thus may be dominant-neg. kinases obtained by alternative splicing of known original sequences of the kinase genes. The novel dominant-neg. kinase variants of the invention are not merely artificially truncated forms, fragments or mutations of known genes, but rather novel sequences which naturally occur within the body of individuals. The invention also concerns pharmaceutical compns. and detection methods using these sequences.

IT 449226-29-3

RL: PRP (Properties)

(unclaimed protein sequence; dominant-neg. variants of human protein kinases that inhibit the phosphorylation activity of their active enzyme isoforms)

L2 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:521988 HCAPLUS

DOCUMENT NUMBER: 137:74472

TITLE: Human cDNAs for NF-kB activating proteins

INVENTOR(S): Matsuda, Akio; Honda, Goichi; Muramatsu, Shuji;

Nagano, Yukiko

PATENT ASSIGNEE(S): Asahi Kasei Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 841 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                      KIND
                                           ______
                            _____
                                     WO 2001-JP11389 20011225
                            20020711
     WO 2002053737
                     A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
             SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
                          20031022
                                           EP 2001-272530
     EP 1354950
                       A1
                                                            20011225
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           US 2002-42211
     US 2003170719
                     A1
                            20030911
                                                            20020107
PRIORITY APPLN. INFO.:
                                        JP 2000-402288 A 20001228
                                        JP 2001-88912
                                                         A 20010326
                                        JP 2001-254018
                                                         Α
                                                            20010824
                                        US 2000-258315P
                                                         Ρ
                                                            20001228
                                        US 2001-278640P
                                                         Ρ
                                                            20010326
                                        US 2001-314385P
                                                         P 20010824
                                        US 2001-24298
                                                         A2 20011221
                                        WO 2001-JP11389 W 20011225
    Novel human proteins having an NF-kB activating effect, cDNAs,
AΒ
     recombinant expression, use in diagnosis and drug screening, are
     disclosed. Use of antibodies, ribozymes, or antisense
     oligonucleotides for those cDNAs and proteins for treatment of
     inflammation, autoimmune disease, infection, cancer, bone disease,
    AIDS, neurodegenerative disease, or ischemic disease, is claimed.
     From a cDNA library prepared from human lung fibroblasts, cDNAs
     encoding proteins having an effect of activating NF-kB were cloned
    and their DNA and amino acid sequence deduced therefrom were determined
     440684-40-2P, Protein (human NF-kB activating)
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic
     preparation); BUU (Biological use, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (amino acid sequence; human cDNAs for NF-kB activating proteins)
REFERENCE COUNT:
                         10
                               THERE ARE 10 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
    ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN
                         2002:509654 HCAPLUS
ACCESSION NUMBER:
                           Correction of: 2002:10496
DOCUMENT NUMBER:
                         137:58696
                           Correction of: 136:49428
TITLE:
                         Human nucleic acids and their encoded proteins
                         and antibodies for the diagnosis and therapy of
                         ovarian cancer
INVENTOR(S):
                         Birse, Charles E.; Rosen, Craig A.
PATENT ASSIGNEE(S):
                         Human Genome Sciences, Inc., USA
SOURCE:
                         PCT Int. Appl., 2922 pp.
```

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

• 91

FAMILI ACC. NOM. COUNT:

PATENT INFORMATION:

PATENT NO.				KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE		
WO	WO 2002000677				A1 20020103				WO 2001-US18569 20010607							
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
														MX,		
		NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,
		RU,	TJ,	TM	•	•	•	•	•	•	•	•	•	•	•	•
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,
		TR,	BF,	вJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,
		TG	·	•	·	•	•	-	,	•	·	-	•	•	·	•
AU	20010	0414	11	A	5 .	2001	0820		A	J 20	01-4	1411		2001	0208	
PRIORITY APPLN. INFO.: US 2000-209467P P 20000607																
								1	US 2	000-	2412	21P	Р	2000	1020	
								Į	US 2	000-	2417	86P	P	2000	1020	

The present invention relates to novel ovarian cancer-related AB polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "ovarian cancer antigens", and the use of such antigens for detecting disorders of the ovary, particularly the presence of ovarian cancer and ovarian cancer metastases. More specifically, 2185 isolated ovarian cancer-associated cDNA mols. are provided encoding novel polypeptides: Novel ovarian cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian cancer-associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovary, including ovarian cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compns. for inhibiting the production and function of the polypeptides of the present invention. The Sequence Listing was provided as an electronic file, but was not made available in the release of this patent.

IT 439729-90-5P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; human nucleic acids and their encoded proteins and antibodies for the diagnosis and therapy of ovarian cancer)

L2 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:315483 HCAPLUS

DOCUMENT NUMBER: 136:335268

TITLE: Short peptides which selectively modulate the

activity of serine/threonine kinases

Ben-sasson, Shmuel A. INVENTOR(S):

The Children's Medical Center Corp., USA PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part of SOURCE:

U. S. 6,174,993. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
US 2002049301	A1	20020425		US 2000-736076	20001213
US <u>617499</u> 3	B1	20010116		US 1997-861338	19970521
PRIORITY APPLN. INFO.	:		US	1997-861338 A2	19970521

OTHER SOURCE(S): MARPAT 136:335268

Peptides are disclosed which are peptide derivs. of the HJ loop of a serine/threonine kinase. The peptides can modulate the activity of the serine/threonine kinase. Also disclosed are methods of modulating the activity of a serine/threonine kinase in a subject by administering one of the peptides of the invention. The peptides can be used for the treatment of a wide variety of diseases.

216489-73-5P 216489-75-7P - 16 ΤT

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) 46.4

(peptide modulators of serine/threonine kinases)

ΙT 416847-00-2 416847-01-3 416847-41-1 #16847-48-8

RL: PRP (Properties)

(unclaimed sequence; short peptides which selectively modulate the activity of serine/threonine kinases)

ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:746842 HCAPLUS

DOCUMENT NUMBER: 136:51338

Cloning and characterization of Plx2 and Plx3, TITLE:

two additional polo-like kinases from Xenopus

laevis

Duncan, Peter I.; Pollet, Nicolas; Niehrs, AUTHOR(S):

Christof; Nigg, Erich A.

CORPORATE SOURCE: Department of Cell Biology, Max Planck Institute

for Biochemistry, Martinsried, D-82152, Germany Experimental Cell Research (2001), 270(1), 78-87

SOURCE:

CODEN: ECREAL; ISSN: 0014-4827

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal LANGUAGE: English

Members of the family of Polo-like kinases are implicated in the regulation of cell cycle progression in all eukaryotes. In Xenopus laevis, only 1 member of this family, Plx1, has previously been described. Here we report the cloning and characterization of X. laevis Plx2 and Plx3, the likely homologs of mammalian Plk2 (Snk) and Plk3 (Fnk/Prk), resp. RNA expression studies indicate that all 3 Xenopus Plks are present in both occytes and unfertilized eggs. Further anal. by in situ hybridization revealed that Plx1 RNA is ubiquitously expressed in early embryos, but shows more restricted

> 308-4994 Searcher : Shears

expression at later stages. In contrast, Plx2 and Plx3 expression is highly restricted in both early and late-stage embryos. Using Plx-specific antisera, Plx1 and Plx3 polypeptides could readily be detected on immunoblots of oocyte and egg exts. Both Plx1 and Plx3 protein levels remained virtually constant during oocyte maturation. However, whereas Plx1 is more active in M phase than in I phase, Plx3 protein and activity levels remained constant upon release of meiotic metaphase II-arrested egg exts. into interphase. Finally, microinjection of in vitro-transcribed RNAs for Plx1, Plx2, and Plx3 increased the rate of progesterone-induced oocyte maturation, and concomitantly, all 3 kinases became activated. Conversely, overexpression of the corresponding catalytically inactive kinases delayed maturation. This suggests that, at least in oocytes, all 3 kinases may be regulated by similar mechanisms, and they may also share common substrates. However, the strikingly restricted pattern of expression of Plx2 and Plx3 observed in embryos strongly suggests that individual Plk family members perform at least partly distinct functions at later stages of development. (c) 2001 Academic Press.

ΙT 382721-00-8

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; cloning and characterization of two addnl.

polo-like kinases from frog eggs and embryos)

THERE ARE 34 CITED REFERENCES AVAILABLE REFERENCE COUNT:

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

HCAPLUS COPYRIGHT 2003 ACS on STN L2 ANSWER 13 OF 18

2001:629826 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:211644

TITLE: Identification of the human homologue of the

early-growth response gene Snk, encoding a

serum-inducible kinase

Liby, Karen; Wu, Huiyun; Ouyang, Bin; Wu, AUTHOR (S):

Shecao; Chen, Jie; Dai, Wei

Department of Cell Biology, University of CORPORATE SOURCE:

Cincinnati College of Medicine, USA

DNA Sequence (2001), 11(6), 527-533 CODEN: DNSEES; ISSN: 1042-5179 SOURCE:

PUBLISHER: Harwood Academic Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

Murine serum inducible kinase (mSnk) was recently cloned and characterized as an early-growth response gene involved in cell proliferation. Here we report the isolation and characterization of its human homolog, named hSnk. Sequence comparison shows that hSnk is highly conserved and its deduced protein sequence shares a significant amino acid identity with mSnk and rSnk proteins, as well as with other polo family kinase gene products. A survey of hSnk expression reveals that while a wide variety of human tissues express a low to moderate level of hSnk transcripts, fetal tissues, testis, and spleen express the most abundant hSnk transcripts. In addition, serum stimulation rapidly induces hSnk expression in fibroblast cells, reaching the peak level of induction within one hour post treatment. Considering that Plk and Prk, two other known human polo-family kinases, control cell cycle checkpoint and cell cycle progression, our current observations suggest that hSnk may also play an important role in cells undergoing rapid cell division

```
or having a high mitotic index.
ΙT
     402712-46-3
     RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
        (amino acid sequence; identification of the human homolog of the
        early-growth response gene Snk, encoding a serum-inducible
        kinase)
                                THERE ARE 13 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                          13
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
     ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN
L2
                          2001:106056 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          134:188986
TITLE:
                          Human expressed sequence tags and primers for
                          synthesizing full-length cDNAs
                          Ota, Toshio; Isogai, Takao; Nishikawa, Tetsuo;
INVENTOR(S):
                          Hayashi, Kohji; Saito, Kaoru; Yamamoto, Junichi;
                          Ishii, Shizuko; Sugiyama, Tomoyasu; Wakamatsu,
                          Ai; Nagai, Keiichi; Otsuki, Tetsuji
PATENT ASSIGNEE(S):
                          Helix Research Institute, Japan
                          Eur. Pat. Appl., 2527 pp.
SOURCE:
                          CODEN: EPXXDW
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT: 12
PATENT INFORMATION:
                      KIND DATE
                                            APPLICATION NO.
     PATENT NO.
                       ____
                             _____
                                             -----
                                                              _____
                                           EP 2000-116126 20000728
     EP 1074617
                      A2 20010207
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
                                             JP 2000-196309
                                                              20000626
     JP 2002171977
                      A2
                             20020618
                                             EP 2000-948282
                             20020515
                                                              20000728
     EP 1205549
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
                                             JP 2000-280990
                                                              20000728
     JP 2002191363
                      A2
                             20020709
                                          JP 1999-248036 A 19990729
PRIORITY APPLN. INFO.:
                                          JP 1999-300253
                                                          A 19990827
                                                          A 20000111
                                          JP 2000-118776
                                          JP 2000-183767
                                                          A 20000502
                                          JP 2000-241899
                                                          A 20000609
                                          US 1999-159590P P 19991018
                                          US 2000-183322P P 20000217
                                                           W 20000728
                                         WO 2000-JP5065
     Primers for synthesizing full-length cDNAs and their use are
AΒ
     provided. The invention provides 5'-end sequences for 5602 partial
     cDNA sequences (expressed sequence tags, ESTs) and 3'-end sequences
     for 4970 of these clones. Furthermore, primers for synthesizing the full-length cDNA have been provided to clarify the function of the
     protein encoded by the cDNA. The full-length cDNA sequences s of
     the present invention containing the translation start site provides
```

Searcher: Shears 308-4994

[This abstract record is one of 6 records for this patent necessitated

information useful for analyzing the functions of the proteins. Tissue- and cell-specific expression patterns are also provided.

by the large number of index entries required to fully index the

document and publication system constraints.].

326937-52-4, Protein (human clone PLACE1011923) ΙT RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (amino acid sequence; human expressed sequence tags and primers for synthesizing full-length cDNAs) ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN 1999:139942 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 130:192783 TITLE: Cloning and cDNA sequence of human serum-inducible kinase Snk INVENTOR(S): Anderson, Karen M.; Jackson, Jeffrey R.; Hansbury, Michael J.; Nerurkar, Sandhya S.; Roshak, Amy K.; Bouzyk, Mark PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA SOURCE: PCT Int. Appl., 43 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _____ _____ ______ ----WO 9909146 A1 19990225 WO 1998-US17248 19980820 W: CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 6063609 A 20000516 US 1998-136282 A1 20000614 EP 1998-942152 20000516 US 1998-136282 19980820 EP 1007645 19980820 R: BE, CH, DE, DK, FR, GB, IT, LI, NL JP 2001514882 T2 20010918 JP 2000-509813 19980820 US 2000-505744 20000216 US 1997-56112P P 19970820 US 6245544 В1 20010612 PRIORITY APPLN. INFO.: A3 19980820 US 1998-136282 WO 1998-US17248 W 19980820 AB The serum-inducible kinase (Snk) polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. The nucleotide sequence of human Snk is a cDNA sequence and comprises an open reading frame encoding a polypeptide of 685 amino acids that is structurally related to other proteins of the Polo-like kinase family and having homol. and/or structural similarity with murine serum-inducible kinase. The gene of the present invention maps to human chromosome 5d12.1-q13.2/D5S491-D5S427. Also disclosed are methods for utilizing Serum Inducible Kinase (Snk) polypeptides and polynucleotides in therapy, and diagnostic assays for such. 220748-32-3P RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (amino acid sequence; cloning and cDNA sequence of human serum-inducible kinase Snk) REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Searcher: Shears 308-4994

ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

L2

1999:9924 HCAPLUS ACCESSION NUMBER:

130:77973 DOCUMENT NUMBER:

Disease associated protein kinases of human and TITLE:

their cDNA sequences

INVENTOR(S): Bandman, Olga; Hillman, Jennifer L.; Corley,

Neil C.; Guegler, Karl J.; Lal, Preeti; Goli,

Surya K.; Shah, Purvi

PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.		KI	ND	DATE				APPL	ICATI	ON N	ο.	DATE		
WO	9858	052		A.	2	1998	1223		1	WO 1	.998 - U	S128	13	1998	0619	
WO	9858	052		A.	3	1999	0610									
	W:	AT,	ΑU,	BR,	CA,	CH,	CN,	DE,	DK	, ES	5, FI,	GB,	IL,	JP,	KR,	MX,
		NO,	ΝZ,	RU,	SE,	SG,	US,	AM,	ΑZ	, BY	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG	, ZW	7, AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU	, MC	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE	, SN	I, TD,	TG				
US	5885	803		Α		1999	0323			US 1	.997-8	7898	9	19970	0619	
AU	9881	547		A	1	1999	0104			AU 1	998-8	1547		19980	0619	
EP	1007	692		A.	2	2000	0614			EP 1	.998-9	3140	7	19980	0619	
	R:	BE,	DE,	ES,	FR,	GB,	ΙT,	NL								
US	6207	148		В	1	2001	0327			US 1	999-2	7279	6	19990	0319	
US	2003	1702	19	A	1	2003	0911			US 2	2001-7	6997	0	20010	0124	
PRIORIT	Y APP	LN.	INFO	. :					US	1997	-8789	89	A2	19970	0619	
									WO	1998	3-US12	813	W	19980	0619	
									US	1999	-2727	96	А3	19990	0319	

The invention provides human disease associated protein kinases and AB polynucleotides (collectively designated DAPK) which identify and encode them. The invention also provides expression vectors, host cells, agonists, antibodies and antagonists. The invention further provides methods for diagnosing and treating disorders associated with expression of human disease associated protein kinases. The amino acid sequences and cDNA sequences of some human disease-associated protein kinases are presented.

ΙT 218611-29-1

RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; disease associated protein kinases of human and their cDNA sequences)

ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

1998:790656 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 130:22236

TITLE: Short peptides which selectively modulate the

activity of serine/threonine kinases

INVENTOR(S): Ben-Sasson, Shmuel A.

The Children's Medical Center Corp., USA; Yissum PATENT ASSIGNEE(S):

Research Development Company of the Hebrew

PCT Int. Appl., 70 pp. SOURCE:

CODEN: PIXXD2

Searcher : 308-4994 Shears

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

ותי• ותו

PATENT INFORMATION:

PA	rent :	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE		
									-							
	9853								W	0 19	98-U	S103	19	1998	0520	
WO	9853	050		A.	3	1999	0225									
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	ΓI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	ΙL,	IS,	JΡ,
		KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,
		ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,
		KZ,	MD,	RU,	ТJ,	TM										
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	ΤG				
US	6174	993		B	1	2001	0116		Ü	S 19	97-8	6133	8	19970)521	
AU	9875	833		A.	1	1998	1211		A	U 19	98-7	5833		19980	0520	
	7346															
EP	9833	46		A.	2	2000	0308		E	P 19	98-92	2357	1	19980	0520	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,
		PT,	ΙE,	SI,	LT,	LV,	FI,	RO								
JP	2002	5006	49	T	2	2002	0108		J	P 19	98-5	5058	0	19980	0520	
US	2002	0287	72	A:	1	2002	0307		Ü	S 20	00-73	3527	4	20003	1211	
US	2003	0041	03						U	S 20	01-12	2035		20013	1211	
PRIORITY	APP	LN.	INFO.	. :				1	US 1	997-	8613	38	A2	19970	0521	
								1	wo 1	998-1	JS103	319	W	19980	0520	
								1	US 2	000-	7352	74	A2	2000	1211	

AB Disclosed are peptides which are peptide derivs. of the HJ loop of a serine/threonine kinase. Modified peptides derivs. are provided from the modified sequence or subsequence of the HJ loop of such kinases as RAF, cAMP-dependent kinase, protein kinase C, the G protein-coupled receptor kinases \$ARK1, \$BARK2, GRK1 and GRKs4-6, calmodulin-dependent kinase, and Polo. The peptides can modulate the activity of the serine/threonine kinase. For example, peptide derivs. of the HJ loop of Raf and Polo inhibit the proliferation of bovine aortic cells and the transformed mouse cell lines MS1 and/or SVR cells in vitro at concns. as low as 10 μM . Further examples include (1) inhibition of the production of collagen by fetal lung fibroblasts by an HJ peptide deriv of activin/TGF $\!\beta R$ and (2) morphol. changes in B16 melanoma cells by an HJ peptide derivative of integrin-linked kinase ILK. Also disclosed are methods of modulating the activity of a serine/threonine kinase in a subject by administering one of the peptides of the present invention.

IT 216489-73-5 216489-75-7 216489-77-9 216489-79-1 216489-81-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(Polo kinase-derived; short peptides which selectively modulate the activity of serine/threonine kinases)

IT 216490-49-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(SNK kinase-derived; short peptides which selectively modulate

the activity of serine/threonine kinases)

```
ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                         1993:444118 HCAPLUS
DOCUMENT NUMBER:
                         119:44118
TITLE:
                         Identification of an early-growth-response gene
                         encoding a novel putative protein kinase
AUTHOR(S):
                         Simmons, Daniel L.; Neel, Benjamin G.; Stevens,
                         Ryan; Evett, Gary; Erikson, Raymond L.
CORPORATE SOURCE:
                         Dep. Chem., Brigham Young Univ., Provo, UT,
                         84602, USA
SOURCE:
                         Molecular and Cellular Biology (1992), 12(9),
                         4164-9
                         CODEN: MCEBD4; ISSN: 0270-7306
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     Early-growth-response genes, also known as immediate-early genes,
     play important roles in regulating cell proliferation. A new type
     of early-growth-response gene product, a 77,811-Da putative
     serine/threonine kinase, was identified which is highly inducible by
     serum and phorbol ester. MRNA encoding this putative kinase is
     markedly elevated within 1 h after treatment with mitogen, and this
     induction is synergistically increased by cycloheximide.
     Dexamethasone blocks serum induction of the kinase mRNA, as does
     transformation by v-Ki-ras. The kinase mRNA was detected in mouse
     brain, lung, and heart. This new putative kinase, called Snk, for
     serum-inducible kinase, showed similarity in its proposed catalytic
     domain to many other protein kinases; however, no other kinase
     showed enough sequence similarity with Snk to suggest the existence
     of a common function. Hence, Snk represents a new type of protein
     kinase involved in the early mitogenic response whose activity is
     transcriptionally and posttranscriptionally regulated.
ΙT
     148466-70-0
     RL: PRP (Properties); BIOL (Biological study)
        (amino acid sequence of, complete)
E1 THROUGH E25 ASSIGNED
     FILE 'REGISTRY' ENTERED AT 14:29:04 ON 14 NOV 2003
L3
             25 SEA FILE=REGISTRY ABB=ON PLU=ON (216489-73-5/BI OR
                216489-75-7/BI OR 402712-46-3/BI OR 148466-70-0/BI OR
                216489-77-9/BI OR 216489-79-1/BI OR 216489-81-5/BI OR
                216490-49-2/BI OR 218611-29-1/BI OR 220748-32-3/BI OR
                326937-52-4/BI OR 382721-00-8/BI OR 416847-00-2/BI OR
                416847-01-3/BI OR 416847-41-1/BI OR 416847-48-8/BI OR
                439729-90-5/BI OR 440684-40-2/BI OR 449226-29-3/BI OR
                480062-88-2/BI OR 481546-49-0/BI OR 483718-42-9/BI OR
                496831-29-9/BI OR 518362-19-1/BI OR 599342-26-4/BI)
L4
            25 L1 AND L3
     ANSWER 1 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     599342-26-4 REGISTRY
CN
     Protein (human clone CA2343602-SEQID-15222 N-terminal fragment)
     (9CI) (CA INDEX NAME)
OTHER NAMES:
     3220: PN: CA2343602 SEQID: 15222 claimed protein
CN
CI
     MAN
```

SQL 90 SEO 1 MELKVGDFGL AARLEPLEHR RRTICGTPNY LSPEVLXKXG HGCESXIWAL 51 GCVMYTMLLG RPPFETTKSQ RNLQVHKGNN VYNAILIAGS ==== ==== HITS AT: 57-64 REFERENCE 1: 139:241380 ANSWER 2 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN L4RN 518362-19-1 REGISTRY CN Protein (human clone C-PLACE1011923 protein kinase/protein phosphatase sequence homolog) (9CI) (CA INDEX NAME) OTHER NAMES: CN 14: PN: US20030082776 SEQID: 14 claimed protein CI MAN SQL 469 SEO 1 MELKVGDFGL AARLEPLEHR RRTICGTPNY LSPEVLNKOG HGCESDIWAL 51 GCVMYTMLLG RPPFETTNLK ETYRCIREAR YTMPSSLLAP AKHLIASMLS 101 KNPEDRPSLD DIIRHDFFLO GFTPDRLSSS CCHTVPDFHL SSPAKNFFKK 151 AAAALFGGKK DKARYIDTHN RVSKEDEDIY KLRHDLKKTS ITQQPSKHRT 201 DEELQPPTTT VARSGTPAVE NKQQIGDAIR MIVRGTLGSC SSSSECLEDS 251 TMGSVADTVA RVLRGCLENM PEADCIPKEQ LSTSFQWVTK WVDYSNKYGF 301 GYQLSDHTVG VLFNNGAHMS LLPDKKTVHY YAELGQCSVF PATDAPEQFI 351 SQVTVLKYFS HYMEENLMDG GDLPSVTDIR RPRLYLLQWL KSDKALMMLF 401 NDGTFQVNFY HDHTKIIICS QNEEYLLTYI NEDRISTTFR LTTLLMSGCS 451 SELKNRMEYA LNMLLQRCN HITS AT: 57-64 **RELATED SEOUENCES AVAILABLE WITH SEOLINK** REFERENCE 1: 138:350479 ANSWER 3 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN 1.4 RN 496831-29-9 REGISTRY 5: PN: US20030027756 FIGURE: 2 unclaimed sequence (9CI) (CA INDEX CN NAME) CI MAN SOL 400 SEO 1 MELLRTITYO PAASTKMCEO ALGKGCGGDS KKKRPPQPPE ESQPPQSQAQ 51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT 101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE 151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE 201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE 251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP ======= 301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFYP DRLSSSCCHT 351 VPDFWLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH HITS AT: 273-280 1: 138:147705 REFERENCE ANSWER 4 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN L4RN 483718-42-9 REGISTRY CN Serum-inducible kinase (mouse strain FVB/N clone MGC:7061

```
IMAGE: 3156743) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AAH34513
CN
     GenBank AAH34513 (Translated from: GenBank BC034513)
CI
SOL
     682
SEQ
         1 MELLRTITYQ PAAGTKMCEQ ALGKACGGDS KKKRPQQPSE DGQPQAQVTP
        51 AAPHHHHHHS HSGPEISRII VDPTTGKRYC RGKVLGKGGF AKCYEMTDLT
       101 NNKVYAAKII PHSRVAKPHQ REKIDKEIEL HRLLHHKHVV QFYHYFEDKE
       151 NIYILLEYCS RRSMAHILKA RKVLTEPEVR YYLRQIVSGL KYLHEQEILH
       201 RDLKLGNFII NEAMELKVGD FGLAARLEPL EHRRRTICGT PNYLSPEVLN
       251 KQGHGCESDI WALGCVMYTM LLGRPPFETT NLKETYRCIR EARYTMPSSL
       301 LAPAKHLIAS MLSKNPEDRP SLDDIIRHDF FLQGFTPDRL SSSCCHTVPD
       351 FHLSSPAKNF FKKAAAALFG GKKDKARYND THNKVSKEDE DIYKLRHDLK
       401 KVSITQQPSK HRADEEPQPP PTTVARSGTS AVENKQQIGD AIRMIVRGTL
       451 GSCSSSECL EDSTMGSVAD TVARVLRGCL ENMPEADCIP KEQLSTSFQW
       501 VTKWVDYSNK YGFGYQLSDH TVGVLFNNGA HMSLLPDKKT VHYYAELGQC
       551 SVFPATDAPE QFISQVTVLK YFSHYMEENL MDGGDLPSVT DIRRPRLYLL
       601 QWLKSDKALM MLFNDGTFQV NFYHDHTKII ICNQSEEYLL TYINEDRIST
       651 TFRLTTLLMS GCSLELKNRM EYALNMLLOR CN
HITS AT:
           270-277
REFERENCE
            1: 138:84325
     ANSWER 5 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     481546-49-0 REGISTRY
CN
     Protein (swine Polo-like kinase Plk2 sequence homolog fragment)
     (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AAK27154
CN
     GenBank AAK27154 (Translated from: GenBank AF348424)
CN
     Protein (Sus scrofa Polo-like kinase Plk2 sequence homolog fragment)
CI
     MAN
SQL
    316
SEO
         1 PEVLNKQGHG CESDIWALGC VMYTMLLGRP PFETTNLKET YRCIREARYT
                                     ====== ==
        51 MPSSLLAPAK HLIASMLSKN PEDRPSLDDI IRHEFFLQGF TPDRLSSSCC
       101 HTVPDFHLSS PAKNFFKKAA AALFGGKKDK ARYIDTHNRV SKEDEEIYKL
       151 RHDLKKTSIT QQPSKHRTDE ELQPPTTTVA RSGTPAVENK QQIGDAIRMI
       201 VRGTLGSCSS SSECLEDSTM GSVADTVARV LRGCLENMPE ADCIPKEQLS
       251 TSFQWVTKWV DYSNKYGFGY QLSDHTVGVL FNNGAHMSLL PDKKTVHYYA
       301 ELGQCSVFPA TDAPEQ
           25-32
HITS AT:
REFERENCE
            1: 139:227956
    ANSWER 6 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
T.A
RN
     480062-88-2 REGISTRY
     (Protein for MGC:10589) (human clone MGC:10589 IMAGE:3831747) (9CI)
CN
     (CA INDEX NAME)
OTHER NAMES:
     GenBank AAH13879
CN
     GenBank AAH13879 (Translated from: GenBank BC013879)
CI
    MAN
SQL
    685
```

```
SEQ
         1 MELLRTITYQ PAASTKMCEQ ALGKGCGADS KKKRPPQPPE ESQPPQSQAQ
        51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
       101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
       151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
       201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
       251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
       301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
       351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
       401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
       451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
       501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTVHYYAEL
       551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
       601 YLLQWLKSDK ALMMLFNDGT FQVNFYHDHT KIIICSQNEE YLLTYINEDR
       651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LQRCN
HITS AT:
           273-280
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 138:84320
     ANSWER 7 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     449226-29-3 REGISTRY
CN
     249: PN: US20020110811 SEQID: 249 unclaimed protein (9CI) (CA INDEX
     NAME)
CI
     MAN
SQL
     685
SEQ
         1 MELLRTITYQ PAASTKMCEQ ALGKGCGGDS KKKRPPQPPE ESQPPQSQAQ
        51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
       101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
       151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
       201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
       251 VLNKOGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
                                   ======
       301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
       351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
       401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
       451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
       501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTVHYYAEL
       551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
       601 YLLQWLKSDK ALMMLFNDGT FOVNFYHDHT KIIICSONEE YLLTYINEDR
       651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LORCN
HITS AT:
           273-280
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 137:181594
T.4
     ANSWER 8 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     440684-40-2 REGISTRY
CN
     Protein (human NF-kB activating) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     39: PN: WO02053737 SEQID: 101 claimed protein
CI
     MAN
SQL 685
```

```
SEQ
         1 MELLRTITYQ PAASTKMCEQ ALGKGCGADS KKKRPPQPPE ESOPPOSQAQ
        51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
       101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
       151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
       201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
       251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
                                   =======
       301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
       351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
       401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
       451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
       501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTVHYYAEL
       551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
       601 YLLQWLKSDK ALMMLFNDGT FQVNFYHDHT KIIICSQNEE YLLTYINEDR
       651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LQRCN
HITS AT:
           273-280
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 137:74472
L4
     ANSWER 9 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     439729-90-5 REGISTRY
CN
     Ovary-associated antigen (human clone HAOSM08 fragment) (9CI) (CA
     INDEX NAME)
OTHER NAMES:
CN
     3122: PN: WO0200677 SEQID: 3124 claimed protein
CI
SQL
    753
SEO
         1 AVTWCRVSSL RPLPASPYIR LRRALSLAQV DRXGASRHQR QGCEDHGRLG
        51 RVTAPRGWOR AVRGGKATME LLRTITYOPA ASTKMCEQAL GKGCGADSKK
       101 KRPPQPPEES QPPQSQAQVP PAAPHHHHHH SHSGPEISRI IVDPTTGKRY
       151 CRGKVLGKGG FAKCYEMTDL TNNKVYAAKI IPHSRVAKPH QREKIDKEIE
       201 LHRILHHKHV VQFYHYFEDK ENIYILLEYC SRRSMAHILK ARKVLTEPEV
       251 RYYLRQIVSG LKYLHEQEIL HRDLKLGNFF INEAMELKVG DFGLAARLEP
       301 LEHRRRTICG TPNYLSPEVL NKQGHGCESD IWALGCVMYT MLLGRPPFET
       351 TNLKETYRCI REARYTMPSS LLAPAKHLIA SMLSKNPEDR PSLDDIIRHD
       401 FFLQGFTPDR LSSSCCHTVP DFHLSSPAKN FFKKAAAALF GGKKDKARYI
       451 DTHNRVSKED EDIYKLRHDL KKTSITQQPS KHRTDEELQP PTTTVARSGT
       501 PAVENKQQIG DAIRMIVRGT LGSCSSSSEC LEDSTMGSVA DTVARVLRGC
       551 LENMPEADCI PKEQLSTSFQ WVTKWVDYSN KYGFGYQLSD HTVGVLFNNG
       601 AHMSLLPDKK TVHYYAELGQ CSVFPATDAP EQFISQVTVL KYFSHYMEEN
       651 LMDGGDLPSV TDIRRPRLYL LQWLKSDKAL MMLFNDGTFQ VNFYHDHTKI
       701 IICSQNEEYL LTYINEDRIS TTFRLTTLLM SGCSSELKNR MEYALNMLLQ
       751 RCN
           341-348
HITS AT:
REFERENCE
            1:
               137:58696
L4
     ANSWER 10 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     416847-48-8 REGISTRY
CN
     L-Glutamic acid, L-methionyl-L-leucyl-L-leucylglycyl-L-lysyl-L-
     prolyl-L-prolyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     47: PN: US20020049301 SEQID: 17 unclaimed sequence
CN
SQL
     9
```

```
SEQ
          1 MLLGKPPFE
HITS AT:
            1-8
```

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:335268

ANSWER 11 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN 1.4

RN **416847-41-1** REGISTRY

L-Glutamic acid, glycyl-L-methionyl-L-leucyl-L-leucylglycyl-L-CN arginyl-L-prolyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

37: PN: US20020049301 SEQID: 57 unclaimed sequence CN

SQL 10

SEQ 1 GMLLGRPPFE =======

2-9 HITS AT:

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:335268

ANSWER 12 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN L4

RN 416847-01-3 REGISTRY

L-Serine, L-methionyl-L-leucyl-L-leucylglycyl-L-arginyl-L-prolyl-L-CN prolyl-L-phenylalanyl-L- α -glutamyl-L-threonyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2: PN: US20020049301 SEQID: 19 unclaimed sequence

SQL 11

SEO 1 MLLGRPPFET S

HITS AT: 1 - 11

RELATED SEQUENCES AVAILABLE WITH SEQLINK

1: 136:335268 REFERENCE

L4ANSWER 13 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN

RN 416847-00-2 REGISTRY

L-Serine, L-leucylglycyl-L-arginyl-L-prolyl-L-prolyl-L-phenylalanyl-CN $L-\alpha$ -glutamyl-L-threonyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

HITS AT:

CN 1: PN: US20020049301 SEQID: 18 unclaimed sequence SQL

SEQ 1 LGRPPFETS

=======

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:335268

1 - 9

Seq. 19

Son. 15

308-4994

Searcher :

Shears

```
ANSWER 14 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
L4
RN
     402712-46-3 REGISTRY
     Kinase (phosphorylating), gene Snk protein (human gene Snk) (9CI)
CN
     (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AAC14573
     GenBank AAC14573 (Translated from: GenBank AF059617)
CN
     Serum-inducible kinase (human)
CN
CT
     MAN
SQL
    685
         1 MELLRTITYQ PAASTKMCEQ ALGKGCGGDS KKKRPPQPPE ESQPPQSQAQ
SEO
        51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
       101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
       151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
       201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
       251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
       301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
       351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
       401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
       451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
       501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTVHYYAEL
       551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
       601 YLLQWLKSDK ALMMLFNDGT FQVNFYHDHT KIIICSQNEE YLLTYINEDR
       651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LQRCN
HITS AT:
           273-280
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 138:347
REFERENCE
            2: 136:211644
     ANSWER 15 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
T.4
     382721-00-8 REGISTRY
RN
CN
     Kinase (phosphorylating), gene Snk protein (Xenopus laevis gene
     Plx2) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     GenBank AAL30175
     GenBank AAL30175 (Translated from: GenBank AF357840)
CN
CN
     Polo-like kinase 2 (Xenopus laevis gene Plx2)
CI
SOL
     666
SEO
         1 MELLRNIAYO PSSGGKMCEO ALGRVCDPDR RWKVPGDGEP IHHSCSATDV
        51 SRIITDPGTG RRYCRGKVLG KGGFAKCYEM KDLTTNKIYA AKIIPHSRVS
       101 KPHOREKIDK EIELHRTLNH RHVVOFYHYF EDKENIYILM EYCGRRSMAH
       151 ILKTRKVLTD PEVRYYLKQI VSGLKYLHEQ EILHRDLKLG NFFINESMEL
       201 KVGDFGLAAR LEPLEQRRRT ICGTPNYLSP EVLNKQGHGC ESDIWALGCV
       251 MYTMLLGRPP FETTNLKETY KCIREARYSL PSSLMTSAKH LIASMLSRNP
              ======
       301 EDRPSLDEIT QHDFFTQGFT PERLPTTCCH TAPDFHLSSP AKNFFKKAAA
       351 ALFGGKKEKS KYLDNHNKLP KEDEVIYKLR QGLQKNTISH QRHNPRTDEE
       401 IKTISKSDVL VERADKQHMG DTIHMIVRGT LGSCSSSSEC LEDSTMGTVA
       451 DTVARVLKDC LEKMPDADAI PKEQIDTSFH WVTKWVDYSN KYGFGYQLSD
       501 HTVGVLFNNG AHMSFLPDKK TVHYYAELGQ CSVFPATEAP EQFISQVTVL
       551 KYFSHYMEEN LMDGGDLPSV TDVCRPRLYL LQWLKSDKAL MMLFNDGTFQ
```

```
601 VNFYHDHTKI IIANONDEYV LTYINEDRMS TTFHLSTLLI SGGSSDLKNR
       651 MEYALNMLLO RCNEVA
HITS AT:
           254-261
            1: 136:51338
REFERENCE
     ANSWER 16 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
L4
RN
     326937-52-4 REGISTRY
CN
     Protein (human clone PLACE1011923) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     1057: PN: EP1074617 SEQID: 15726 claimed protein
CI
    469
SOL
         1 MELKVGDFGL AARLEPLEHR RRTICGTPNY LSPEVLNKQG HGCESDIWAL
SEQ
        51 GCVMYTMLLG RPPFETTNLK ETYRCIREAR YTMPSSLLAP AKHLIASMLS
                 =======
       101 KNPEDRPSLD DIIRHDFFLQ GFTPDRLSSS CCHTVPDFHL SSPAKNFFKK
       151 AAAALFGGKK DKARYIDTHN RVSKEDEDIY KLRHDLKKTS ITQQPSKHRT
       201 DEELQPPTTT VARSGTPAVE NKQQIGDAIR MIVRGTLGSC SSSSECLEDS
       251 TMGSVADTVA RVLRGCLENM PEADCIPKEQ LSTSFQWVTK WVDYSNKYGF
       301 GYQLSDHTVG VLFNNGAHMS LLPDKKTVHY YAELGQCSVF PATDAPEQFI
       351 SQVTVLKYFS HYMEENLMDG GDLPSVTDIR RPRLYLLQWL KSDKALMMLF
       401 NDGTFQVNFY HDHTKIIICS QNEEYLLTYI NEDRISTTFR LTTLLMSGCS
       451 SELKNRMEYA LNMLLQRCN
HITS AT:
           57-64
**RELATED SEOUENCES AVAILABLE WITH SEOLINK**
            1: 134:188986
REFERENCE
     ANSWER 17 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
L4
     220748-32-3 REGISTRY
RN
     Kinase (phosphorylating), protein, Snk (human) (9CI)
                                                          (CA INDEX
CN
     NAME)
CI
     MAN
SQL
    685
         1 MELLRTITYQ PAASTKMCEQ ALGKGCGADS KKKRPPQPPE ESQPPQSQAQ
SEQ
        51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
       101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
       151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
       201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
       251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
       301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
       351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
       401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
       451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
       501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTVHYYAEL
       551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
       601 YLLQWLKSDK ALMMLFNDGT FQVNFYHDHT KIIICSQNEE YLLTYINEDR
       651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LQRCN
HITS AT:
           273-280
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE
          1: 130:192783
```

```
ANSWER 18 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
J.4
RN
          218611-29-1 REGISTRY
          Kinase (phosphorylating), protein (human clone 39043
          disease-associated isoform DAPK-1) (9CI)
                                                                                                  (CA INDEX NAME)
CI
SQL
          685
SEO
                   1 MELLRTITYQ PAASTKMCEQ ALGKGCGADS KKKRPPQPPE ESQPPQSQAQ
                 51 VPPAAPHHHH HHSHSGPEIS RIIVDPTTGK RYCRGKVLGK GGFAKCYEMT
               101 DLTNNKVYAA KIIPHSRVAK PHQREKIDKE IELHRILHHK HVVQFYHYFE
               151 DKENIYILLE YCSRRSMAHI LKARKVLTEP EVRYYLRQIV SGLKYLHEQE
               201 ILHRDLKLGN FFINEAMELK VGDFGLAARL EPLEHRRRTI CGTPNYLSPE
               251 VLNKQGHGCE SDIWALGCVM YTMLLGRPPF ETTNLKETYR CIREARYTMP
               301 SSLLAPAKHL IASMLSKNPE DRPSLDDIIR HDFFLQGFTP DRLSSSCCHT
               351 VPDFHLSSPA KNFFKKAAAA LFGGKKDKAR YIDTHNRVSK EDEDIYKLRH
               401 DLKKTSITQQ PSKHRTDEEL QPPTTTVARS GTPAVENKQQ IGDAIRMIVR
               451 GTLGSCSSSS ECLEDSTMGS VADTVARVLR GCLENMPEAD CIPKEQLSTS
               501 FQWVTKWVDY SNKYGFGYQL SDHTVGVLFN NGAHMSLLPD KKTAHYYAEL
               551 GQCSVFPATD APEQFISQVT VLKYFSHYME ENLMDGGDLP SVTDIRRPRL
               601 YLLQWLKSDK ALMMLFNDGT FQVNFYHDHT KIIICSQNEE YLLTYINEDR
               651 ISTTFRLTTL LMSGCSSELK NRMEYALNML LQRCN
HITS AT:
                       273-280
REFERENCE
                         1: 130:77973
          ANSWER 19 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
1.4
RN
          216490-49-2 REGISTRY
CN
          L-\alpha-Glutamine, N-(1-oxotetradecyl)glycyl-L-methionyl-L-leucyl-
          L-leucylglycyl-L-arginyl-L-prolyl-L-prolyl-L-phenylalanyl-,
          phenylmethyl ester (9CI) (CA INDEX NAME)
SQL
          10
SEO
                   1 GMLLGRPPFE
HITS AT:
                       2-9
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                         1: 130:22236
L4
          ANSWER 20 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
          216489-81-5 REGISTRY
          \verb|L-Serinamide|, N-acetyl-L-methionyl-L-leucyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-methionyl-L-leucylglycyl-L-arginyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-methionyl-me
          L-prolyl-L-prolyl-L-phenylalanyl-L-\alpha-glutamyl-L-threonyl-,
          phenylmethyl ester (9CI) (CA INDEX NAME)
SOL
         11
                                                                                                                                              Se. 9. 19
SEQ
                   1 MLLGRPPFET S
                       _________
HITS AT:
                       1-11
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                         1: 130:22236
          ANSWER 21 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
1.4
```

Searcher :

Shears

308-4994

```
216489-79-1 REGISTRY
RN
CN
     L-Serinamide, N-acetyl-L-leucylglycyl-L-arginyl-L-prolyl-L-prolyl-L-
     phenylalanyl-L-\alpha-glutamyl-L-threonyl-, phenylmethyl ester
     (9CI) (CA INDEX NAME)
SQL
SEQ
         1 LGRPPFETS
                                                                       Sey. 18 $ 2
           1-9
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 130:22236
L4
     ANSWER 22 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     216489-77-9 REGISTRY
CN
     L-α-Glutamine, N-acetyl-L-methionyl-L-leucyl-L-leucylglycyl-L-
     lysyl-L-prolyl-L-prolyl-L-phenylalanyl-, phenylmethyl ester (9CI)
     (CA INDEX NAME)
SQL
SEQ
         1 MLLGKPPEE
HITS AT:
           1 - 8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1: 130:22236
     ANSWER 23 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
L4
RN
     216489-75-7 REGISTRY
     L-Phenylalaninamide, N-acetyl-L-methionyl-L-leucyl-L-leucylglycyl-L-
CN
     lysyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)
                                                                       Seg. 16
OTHER NAMES:
     12: PN: US20020049301 SEQID: 16 claimed protein
CN
SQL
SEO
         1 MLLGKPPF
           =======
HITS AT:
           1 - 8
REFERENCE
                136:335268
            1:
REFERENCE
            2:
                130:22236
     ANSWER 24 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
L4
RN
     216489-73-5 REGISTRY
     L\text{-}\alpha\text{-}\text{Glutamine, N-acetyl-L-methionyl-L-leucyl-L-leucylglycyl-L-}
     arginyl-L-prolyl-L-prolyl-L-phenylalanyl-, phenylmethyl ester (9CI)
     (CA INDEX NAME)
OTHER NAMES:
     11: PN: US20020049301 SEQID: 15 claimed protein
SQL
SEQ
         1 MLLGRPPFE
           =======
HITS AT:
           1-8
```

REFERENCE 1: 136:335268

REFERENCE 2: 130:22236

- L4 ANSWER 25 OF 25 REGISTRY COPYRIGHT 2003 ACS on STN
- RN **148466-70-0** REGISTRY
- CN Kinase (phosphorylating), protein (mouse clone 2 isoenzyme Snk reduced) (9CI) (CA INDEX NAME)
- CI MAN
- SQL 682

SEQ	1	MELLRTITYQ	PAAGTKMCEQ	ALGKACGGDS	KKKRPQQPSE	DGQPQAQVTP
	51	ААРНННННЫ	HSGPEISRII	VDPTTGKRYC	RGKVLGKGGF	AKCYEMTDLT
	101	NNKVYAAKII	PHSRVAKPHQ	REKIDKEIEL	HRLLHHKHVV	QFYHYFEDKE
	151	NIYILLEYCS	RRSMAHILKA	RKVLTEPEVR	YYLRQIVSGL	KYLHEQEILH
	201	RDLKLGNFFI	NEAMELKVGD	FGLAARLEPL	EHRRRTICGT	PNYLSPEVLN
	251	KQGHGCESDI	WALGCVMYTM	LLGRPPFETT	NLKETYRCIR	EARYTMPSSL
			=	======		
	301	LAPAKHLIAS	MLSKNPEDRP	SLDDIIRHDF	FLQGFTPDRL	SSSCCHTVPD
	351	FHLSSPAKNF	FKKAAAALFG	GKKDKARYND	THNKVSKEDE	DIYKLRHDLK
	401	KVSITQQPSK	HRADEEPQPP	PTTVARSGTS	AVENKQQIGD	AIRMIVRGTL
	451	GSCSSSSECL	EDSTMGSVAD	TVARVLRGCL	ENMPEADCIP	KEQLSTSFQW
	501	VTKWVDYSNK	YGFGYQLSDH	TVGVLFNNGA	HMSLLPDKKT	VHYYAELGQC
	551	SVFPATDAPE	QFISQVTVLK	YFSHYMEENL	MDGGDLPSVT	DIRRPRLYLL
	601	QWLKSDKALM	MLFNDGTFQV	NFYHDHTKII	ICNQSEEYLL	TYINEDRIST

 $\,$ 651 TFRLTTLLMS GCSLELKNRM EYALNMLLQR CN HITS AT: $\,$ 270-277 $\,$

REFERENCE 1: 119:44118

FILE 'HOME' ENTERED AT 14:29:31 ON 14 NOV 2003

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**